

NON-UNIFORM GESTURE PRECISION

ABSTRACT

A motion controlled handheld device includes a display having a viewable surface and operable to generate an image and a gesture database maintaining a plurality of gestures. Each gesture is defined by a motion of the device with respect to a first position of the device. The device includes a motion detection module operable to detect motion of the handheld device within three dimensions and to identify components of the motion in relation to the viewable surface. The device also includes a control module operable to identify a base reference position of the device, track movement of the device, using the motion detection module, to identify a potential gesture, compare the potential gesture against the gestures in the gesture database, and determine whether the potential gesture matches to a compared one of the gestures based on whether a difference between the potential gesture and the compared gesture is within a precision threshold.